

Preface

All life has a common basis and all life activities such as growth, development, reproduction etc. depend on enzyme mediated bio-chemical reactions. There is a certain range of ecological conditions in which most of these complex chemical reactions occur at their maximum ease and efficiency. This does not mean that all organisms require similar set of conditions for their breeding and optimum growth.

However, it does suggest that within an optimal range a large number and type of organisms are likely to occur, grow and multiply. In habitat which do not provide their optimum conditions, organisms shall have to adopt themselves to the prevailing adverse conditions. The process of natural selection shall automatically exclude the delicate forms restricting the number of species to only those which are able to exist under the adverse set of conditions.

Among the millions of species which constitute the biosphere, man indeed is a marvelous product of organic evolution. He has been gifted with unique mental facilities and a pair of hands. The biosphere without man took many hundred million years to produce the environment as it exists today but man appeared on the planet barely one million years ago and during the first 40-60 thousand years of his existence man lived as scavenger, hunter and gatherer of food material. Modern man has, therefore, built up an extraordinary accumulation of "Human Biomass" in which energy and material flow, in enormous quantity from all other systems. He lives a life of comfort and luxury which require additional resources and his activities have acquired immense significance and the consequence of his actions have a global impact.

The ecology and reproduction have become the focus of attention of the scientists today and all the efforts are underway for a better understanding of the complex

interactions among various components of the environment. Science which now dominates every field of our activities and has changed our life style, needs uninterrupted documentation keeping in view the latest advancements and increments in the various disciplines of science and technology.

The present Volume 10 of the book series, *Perspectives in Animal Ecology and Reproduction* has been presented to our esteemed readers in simple, lucid and comprehensive language by contributors who are authority in their respective areas of research and who have always been a source of inspiration for bringing our this humble effort to provide the up-to-date knowledge in the subject.

We hope this book will serve the needs of the biologists, engaged in the field of animal diversity, ecology, breeding biology, natural history, conservation and management strategies. Suggestions and healthy criticism for the improvement of quality of the further volumes will be highly appreciated and thankfully acknowledged. We are grateful to all those contributors who have always been a source of inspiration for bringing out the 10th volume of the book series to provide latest trends and knowledge in the field of animal sciences and for their help and suggestions wherever needed.

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